

MECHANISMS OF VASODILATATION

an official Satellite Symposium
of the XXVII International Congress
of Physiological Sciences

July 10 - 12th, 1977

official carrier: Sabena

MONDAY, July 11th. — Afternoon Session

D. THERAPEUTIC AGENTS CAUSING VASODILATATION

Moderator: T. GODFRAIND (Louvain, Belgium)

2.00 p.m.: *Vasodilatation or Inhibition of Peripheral Vasoconstriction?*
J.M. VAN HUETEN (Brussels, Belgium)

2.20 p.m.: *Inhibitors of Ca Influx*
T. GODFRAIND and H. MOREL (Louvain, Belgium)

2.40 p.m.: *Inhibitors of Cyclic AMP Breakdown*
J.C. BLOCLET (Strasbourg, France)

3.00 p.m.: *Nitrates, Nitroprusside, and Metabolic Inhibitors*
V.A.W. KREYE (Heidelberg, Germany)

3.20 p.m.: *Anesthetic Agents*
B.M. ALTURA (Brooklyn, U.S.A.)

3.40 p.m.: *Coffee Break*

4.00 p.m.: *Altered Vascular Relaxation and Aging*
B.A. BERNKOWITZ (Madison, U.S.A.)

4.20 p.m.: *Relaxation of Vascular Smooth Muscles in Spontaneously Hypertensive Rats*
B. BHIBATA and J.B. CHENG (Honolulu, U.S.A.)

4.40 p.m.: *General Discussion*

Sunday, July 10 (Morning Session)

A. INTRODUCTORY SESSION

8.35 a.m.: *Welcome*
P.M. VANHOUTTE (Antwerp, Belgium)

8.40 a.m.: *Prologue*
J.T. SHEPHERD (Rochester, U.S.A.)

9.00 a.m.: *Movie: "Vasomotion in Arterioles"*
P.C. JOHNSON (Tucson, U.S.A.)

9.10 a.m.: *Movie: "Nerve-Smooth Muscle Interaction in Culture"*
G. BURNSTOCK (London, Great Britain)

B. INTRINSIC FACTORS CONCERNED IN THE RELAXATION OF VASCULAR SMOOTH MUSCLE

Moderator: R. CASTEELS (Leuven, Belgium)

9.30 a.m.: *The Contractile Apparatus of Vascular Smooth Muscle*
A.V. BOMLYO (Philadelphia, U.S.A.)

9.50 a.m.: *The Role of Organelles in Regulating Cytoplasmic Calcium in Vascular Smooth Muscle*
A.P. BOMLYO (Philadelphia, U.S.A.)

10.10 a.m.: *Control of the Actin-Myosin Interaction in Vascular Smooth Muscle*
R.A. MURPHY (Charlottesville, U.S.A.)

10.30 a.m.: *Coffee Break*

11.00 a.m.: *Removal of Activator Ca²⁺*
D.F. BOHRS (Ann Arbor, U.S.A.)

11.20 a.m.: *Mechanics of Smooth Muscle Relaxation*
B. JOHANSSON (Lund, Sweden)

11.40 a.m.: *Membrane Potential and Relaxation*
G. SIEGEL, R. EHERHART, H. GUSTAVSSON and
B. LINDMAN (Berlin, Germany)

12.00 a.m.: *General Discussion*

12.40 p.m.: *Lunch*

TUESDAY, July 12th. — Morning Session

E. LOCAL FACTORS CAUSING VASODILATATION

Moderator: I. LEUSEN (Gen, Belgium)

9.00 a.m.: *Role of Physical Factors in Local Vascular Responses*
H.V. SPARKS (Ann Arbor, U.S.A.)

9.20 a.m.: *Oxygen, Hydrogen Ion, and CO₂ as Local Factors Causing Vasodilatation*
B.R. DULING (Charlottesville, U.S.A.)

9.40 a.m.: *The Mechanism of Potassium Vasodilation*
F.J. HADDY (Bethesda, U.S.A.)

10.00 a.m.: *Coffee Break*

10.20 a.m.: *Vasodilatation Mediated by Hyperosmolarity*
B. MELLANDER and J. LUNDVALL (Lund, Sweden)

10.40 a.m.: *Role of Adenosine, ATP and PO₄ in Resistance Vessel Vasodilatation*
R.M. BERNE (Charlottesville, U.S.A.)

11.00 a.m.: *Adenosine and Adenosine Nucleotides: Action on Vascular Smooth Muscle*
R. VERHAEGHE (Leuven, Belgium)

11.20 a.m.: *General Discussion*

Sunday, July 10 (Afternoon Session)

C. MODULATION BY LOCAL AND HUMORAL EVENTS

Moderator: Z. BACO (Liege, Belgium)

1.45 p.m.: *Myogenic Tone in Resistance Vessels*
P.C. JOHNSON (Tucson, U.S.A.)

2.00 p.m.: *Metabolism and Relaxation*
J. PETERSON (Heidelberg, Germany)

2.20 p.m.: *Disposition of Vasoconstriction Agonists*
W. OSSWALD (Porto, Portugal)

2.40 p.m.: *Locally Produced Humoral Factors*
B.T. ALTURA (Brooklyn, U.S.A.)

3.00 p.m.: *Prostacyclin (PGI₂) Vascular Wall and Vasodilatation*
B. MONCADA and J.R. VANE (Beckenham, Great Britain)

3.20 p.m.: *Coffee Break*

3.40 p.m.: *Role of Endogenous Prostaglandin Biosynthesis in Determining Vascular Tone*
P. NEEDLEMAN and P.B. KULKARNI (St. Louis, U.S.A.)

4.00 p.m.: *Vasodilatation due to Release of Modulator Substance*
M. SZENTIVANYI (Budapest, Hungary)

4.20 p.m.: *Heterogeneity in the Relaxation of Vascular Smooth Muscle*
H. TODA (Saitama, Japan)

4.40 p.m.: *General Discussion*

5.20 p.m.: *Return to Hotel*

TUESDAY, July 12th. — Afternoon Session

F. NEUROGENIC VASODILATATION

Moderator: A. HERMAN (Wilrijk, Belgium)

1.00 p.m.: *Withdrawal of Sympathetic Tone*
F.M. ABBOU (Iowa City, U.S.A.)

1.20 p.m.: *Ganglionic Inhibition by Dopamine and Neurogenic Vasodilatation*
J. WILLEMS and M.G. BOGAERT (Gent, Belgium)

1.40 p.m.: *Interference with Peripheral Adrenergic Neurotransmission*
M.A. MCGRATH and P.M. VANHOUTTE (Rochester, U.S.A. and Wilrijk, Belgium)

2.00 p.m.: *Beta-adrenergic Receptor Mediated Vasodilatation in a Blood Vessel with Intrinsic Muscle Tone*
J.A. BEVAN, R.D. BEVAN, B.E. PEGRAM, J.L. PREHN, and
R. WINQUIST (Los Angeles, U.S.A.)

2.20 p.m.: *Coffee Break*

2.40 p.m.: *Histaminergic and Cholinergic Vasodilator Systems*
M.J. BRODY (Iowa City, U.S.A.)

3.00 p.m.: *An Assessment of Purinergic Nerve Involvement in Vasodilatation*
G. BURNSTOCK (London, Great Britain)

3.20 p.m.: *Immunohistochemical Demonstration of Vasodilatory Peptidergic Nerves in Gut and Brain*
J. HANKO, C. OWMAN, L. EDVINSSON, J. FAHRENKRUG,
R. HAKANSON, L.-G. LARSSON, O. SCHAFFALITZKY DE MU-
CRADDE and F. BUNDREN (Lund, Sweden)

3.40 p.m.: *General Discussion*

3.50 p.m.: *Prospectives*
P.M. VANHOUTTE (Wilrijk, Belgium)

5.00 p.m.: *Return to Hotel*